

(PCT Article 36 and Rule 70)

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2004/004261

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following _____, which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-4, 7, 10-35 as originally filed/furnished
- pages* 5/1, 6, 8 received by this Authority on 28.01.2005
- pages* 5, 9-9/1 received by this Authority on 27.04.2005
- ☒ the claims:
- nos. 4-12, 14-15 as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 2-3, 13 received by this Authority on 28.01.2005
- nos.* 1, 16 received by this Authority on 27.04.2005
- ☒ the drawings:
- sheets figures 1-19 as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1.	Statement		
	Novelty (N)	Claims <u>1-16</u>	YES
		Claims _____	NO
	Inventive step (IS)	Claims <u>1-16</u>	YES
		Claims _____	NO
	Industrial applicability (IA)	Claims <u>1-16</u>	YES
		Claims _____	NO
2.	Citations and explanations (Rule 70.7)		
	(1) Novelty and Inventive Step		
	Document 1: JP 2002-277387 A (Citizen Watch Co., Ltd.), 25 September 2002		
	Document 2: JP 6-118359 A (Matsushita Electric Industrial Co., Ltd.), 28 April 1994		
	<u>Claims 1 to 16</u>		
	<p>The inventions set forth in claims 1 to 16 are novel and involve an inventive step in relation to the documents that are cited in the international search report.</p> <p>In particular, it would not be easy for a person skilled in the art to conceive of the feature wherein the first and second phase modulation sections "are configured so that changes in the amounts of phase modulation cancel one another out" because document 1 (which describes an optical rotation measurement device employing liquid crystal elements that implement phase modulation) does not disclose phase modulation sections that fulfill such a condition, and because the feature in question is not disclosed in document 2, which describes</p>		

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Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
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implementing phase modulation by means of a pair of liquid crystal cells (in document 2, the sum of the amounts of phase modulation is applied to the polarized light that traverses the pair of liquid crystal cells).

(2) Industrial Applicability

The inventions set forth in claims 1 to 16 clearly fulfill the requirement of industrial applicability.

Box No. VIII Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:

(1)

Claims 1, 2 and 12 do not stipulate that the phase modulation means are liquid crystal elements; however, it is considered to be impossible to use phase modulation means other than liquid crystal elements in the light of the disclosures in the embodiments and on page 4 (lines 15 to 26) of the description of the present application. Such being the case, claims 1, 2 and 12 are not fully supported by the description.

(2) In cases when claim 15 does not indirectly cite claim 2, the relationships between the "offset signal" and the other technical features are not clear from the disclosure in claim 15.